

Addressing the “Chronification” of Disease

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The traditional economics paradigm of insurance is best suited for acute illnesses, where relatively healthy patients experience an acute complaint, are treated, and are then returned to basically good health. However, chronic illness has taken on greater prominence over time due to demographic and lifestyle changes, as well as medical advances that have increased survival, subsequently also increasing the portion of the population who experiences chronic disease. As a result, these patients require more resources and treatment over their lifetime.

In response to this “chronification” of disease, as well as a variety of other factors, insurers have put more emphasis on developing programs to manage patients’ health long term. Increasingly, insurers are bearing less risk—their traditional role in the market—and taking a more active role in managing care. That is, they are increasingly “health” companies, not just fiscal intermediaries. Success involves a combination of changing the incentives that patients and providers face and engaging both groups with innovative programs and information designed to improve health outcomes and, ideally, lower costs.

Two of the studies in this issue of *The American Journal of Managed Care®* (AJMC®) demonstrate the clinical and economic consequences of chronic illness and related complications. Fonseca et al demonstrate the burdens associated with poor chronic disease management in one particular area, reporting significant clinical and economic costs associated with hypoglycemia—especially for individuals with poor clinical outcomes. Romanelli et al study a chronic pain population, and as one might expect, this population also had significant health limitations and high spending.

Further, Cross et al report on a pay-for-value program instituted by Blue Cross Blue Shield of Michigan; this program gave practices the resources, information, and incentives intended to improve care, and they report dramatic results. A number of dimensions of quality improved, including a reduction in readmissions and emergency department visits. Despite the reduction in these measures of use, however, overall costs were unchanged. This is consistent with many other studies of patient-centered medical home (PCMH) programs

that support improved primary care. Quality rises, but better primary care is not a panacea for spending concerns; specifically, the broad evidence on the success of PCMHs is mixed. Although PCMHs have achieved small gains in the quality of care¹ and small reductions in utilization,^{2,3} the literature does not yield evidence of consistent, appreciable savings.⁴⁻⁶ However, the mixed picture does not necessarily entail failure of the model. To date, PCMHs have varied greatly in the number of practices included, delivery system structure, and payer participation, and these differences may affect outcomes. The heterogeneity in research results is as notable as the average findings.

Although payment reforms and related incentives are not sufficient to ensure better outcomes generally, the paper by Mandal et al illustrates that large improvements in both clinical and economic outcomes can be achieved when providers are given incentives that reward them for better performance. Their study, of the impact of a capitated payment model in Medicare Advantage, revealed a 6% survival benefit and significant financial savings. This study was just in a single setting, but other population-based payment evaluations have demonstrated financial savings and quality improvements, just not of this magnitude.^{7,8}

Reistroffer et al evaluate a more targeted intervention: coaching for patient activation. Their results are consistent with the hypothesis that better outcomes are associated with lower costs. Similarly, the study by Rau-Murthy et al examines an asthma education program, reporting better outcomes and resource savings. Yet, both of these studies are cross-sectional and the results are not necessarily causal, so more work is needed to confirm and establish the generalizability of the findings. Nevertheless, there is potential for real efficiency gains.

Doshi et al analyze a specific program focused on prescription drugs and chronic disease: synchronizing medication refills. As hypothesized, synchronized refills improved adherence. Better adherence has well-known beneficial effects on quality, and the expense of added use of drugs will be offset, to some degree, by fewer adverse health events. The extent of these offsets is a crucial for policy makers to understand, but in terms of promoting value,

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such programs are almost surely a good deal. Younossi et al use simulation methods to explore offsets in the area of hepatitis C. They find that a broad treatment strategy can result in significant health improvements and spending offsets. Although, in this particular instance, institutional details help generate the savings, the broader point is that in some cases, greater use—even of expensive treatments—can lower spending. The key parameters are the prices of the drugs, the cost of adverse downstream effects, and the number of individuals needed to treat in order to prevent poor downstream outcomes.

Conclusions

The common theme uniting these studies is that chronic care management is a big deal. Although we know that patients with chronic conditions spend more and have worse health outcomes, finding ways to improve outcomes and save money has been hard. Incentives for providers matter, but even with those incentives, providers must find ways to accomplish their goals. This will involve some combination of health information technology, patient and provider engagement, and attention to the clinical services, including drugs, that improve outcomes. The success of these programs will depend not only on their design, but on their execution and the environment in which they are deployed. Every system is

different and we are only at the beginning of our understanding of what works. Much of the existing evidence is based on cross-sectional correlations that establish association, not causality. There is more to do, but it is encouraging to see the vast number of diverse organizations and efforts aimed at improving care for patients with chronic disease. ■

REFERENCES

1. Kern LM, Edwards A, Kaushal R. The patient-centered medical home, electronic health records, and quality of care. *Ann Intern Med.* 2014;160(11):741-749. doi: 10.7326/M13-1798.
2. Rosenthal MB, Alidina S, Friedberg MW, et al. A difference-in-difference analysis of changes in quality, utilization and cost following the Colorado Multi-Payer Patient-Centered Medical Home Pilot. *J Gen Intern Med.* 2016;31(3):289-296. doi: 10.1007/s11606-015-3521-1.
3. Rosenthal MB, Alidina S, Friedberg MW, et al. Impact of the Cincinnati Aligning Forces for Quality Multi-Payer Patient Centered Medical Home Pilot on health care quality, utilization, and costs. *Med Care Res Rev.* 2016;73(5):532-545. doi: 10.1177/1077558715618566.
4. Friedberg MW, Schneider EC, Rosenthal MB, Volpp KG, Werner RM. Association between participation in a multipayer medical home intervention and changes in quality, utilization, and costs of care. *JAMA.* 2014;311(8):815-825. doi: 10.1001/jama.2014.353.
5. Ackroyd SA, Wexler DJ. Effectiveness of diabetes interventions in the patient-centered medical home. *Curr Diab Rep.* 2014;14(3):471. doi: 10.1007/s11892-013-0471-z.
6. Reid RJ, Coleman K, Johnson EA, et al. The Group Health medical home at year two: cost savings, higher patient satisfaction, and less burnout for providers. *Health Aff (Millwood).* 2010;29(5):835-843. doi: 10.1377/hlthaff.2010.0158.
7. Song Z, Rose S, Safran DG, Landon BE, Day MP, Chernew ME. Changes in health care spending and quality 4 years into global payment. *N Engl J Med.* 2014;371(18):1704-1714. doi: 10.1056/NEJMsa1404026.
8. McWilliams JM, Hatfield LA, Chernew ME, Landon BE, Schwartz AL. Early performance of accountable care organizations in Medicare. *N Engl J Med.* 2016;374(24):2357-2366. doi: 10.1056/NEJMsa1600142

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